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Math 6 Unit 4

LearnEveryWare

Quizzes and Tests

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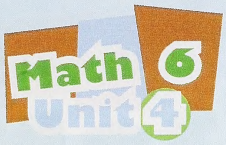

Math 6 Learn EveryWare – Unit 4 Quizzes & Tests
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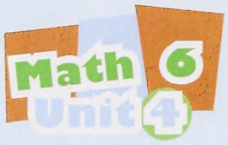

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Math 6
Unit 4

Quiz
Lesson 1

Ratio

Quiz
Lesson 1: Ratio

For 1 – 5: Write each ratio in three ways.

1. 12 boys to 18 girls

2. 3 dogs to 5 cats

3. 8 blankets to 3 pillows

4. 4 apples to 1 orange

5. 7 peanuts to 4 cashews

Math 6
Unit 4

Quiz
Lesson 2

Problem Solving with Ratios

Quiz
Lesson 2: Problem Solving with Ratios

For 1 – 4: Cameron has a bag full of marbles. His bag contains the following number of each colour marble. Write the following ratios in word form, ratio form and fraction form.

Colour of Marble	Number
Red	10
Yellow	15
Blue	14
Green	15
Cat Eye	11

1. What is the ratio of red marbles to blue marbles?

2. What is the ratio of yellow marbles to all marbles?

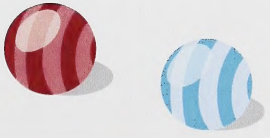
3. What is the ratio of cat eye marbles to all marbles?

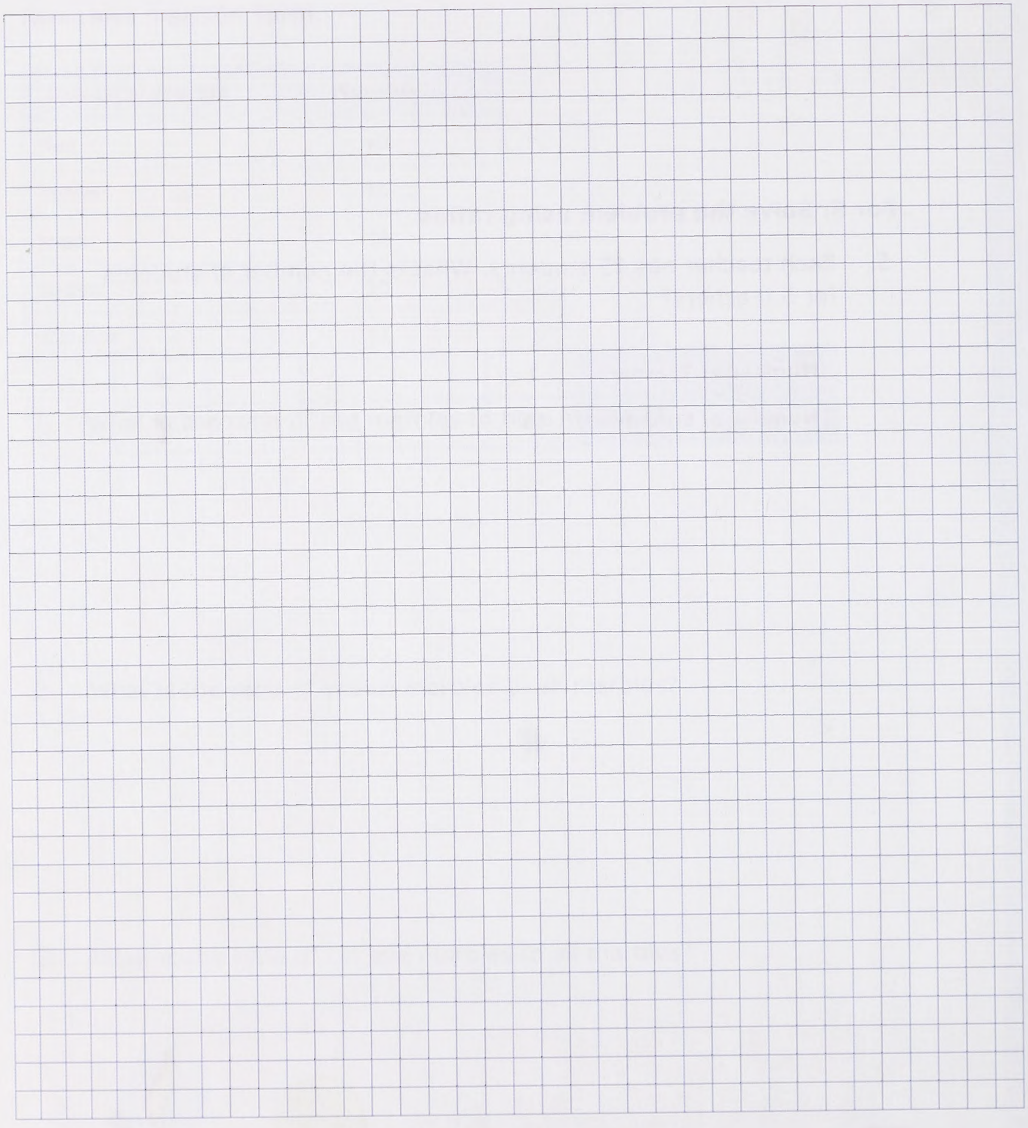
4. What is the ratio of blue marbles to green marbles?

For 5: Solve the problem using ratios.

5. Each teacher has 15 students. What is the number of students for 5 teachers?

Number of Teachers	1				5
Number of Students	15				?





Math 6
Unit 4

Quiz
Lesson 3

Percents as a Ratio or Fraction

Quiz

Lesson 3: Percents as a Ratio or Fraction

1. Write the ratio, fraction, and percent for the shaded portion of the 10 by 10 square.

ratio: _____

fraction: _____

percent: _____

2. Write the ratio 35:100 as a percent.

3. Write the fraction $\frac{62}{100}$ as a percent.

4. Write 45% as a ratio in word form.

5. Write 56% as a fraction.

Math 6
Unit 4

Quiz
Lesson 4

Percents as a Decimal

Quiz

Lesson 4: Percents as a Decimal

For 1 – 2: Write a decimal and a percent for each model.

1.

2.

For 3 – 5: Write a decimal and a percent for each phrase. Use a calculator. Round to the nearest hundredth if necessary.

3. 25 out of 60

4. 18 out of 50

5. 12 out of 20

Math 6
Unit 4

Quiz
Lesson 5

Solving Problems Using Percents

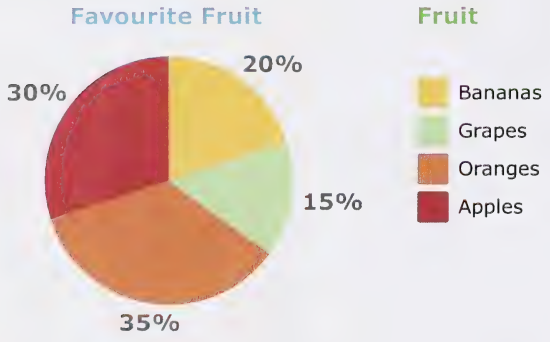
For 1 – 3: Find the percent of each number. Use a calculator.

1. 10% of 350 _____

2. 25% of 800 _____

3. 65% of 40 _____

For 4 – 5: Daksha gave a survey about favourite fruits to his classmates. He graphed his results.



4. What angle measure did he use to make the section for apples?

5. What angle measure did he use to make the section for grapes?

Math 6
Unit 4

Quiz
Lesson 6

Possible Outcomes

For 1 – 3: List all possible outcomes for the experiment.

1. Spinning the spinner

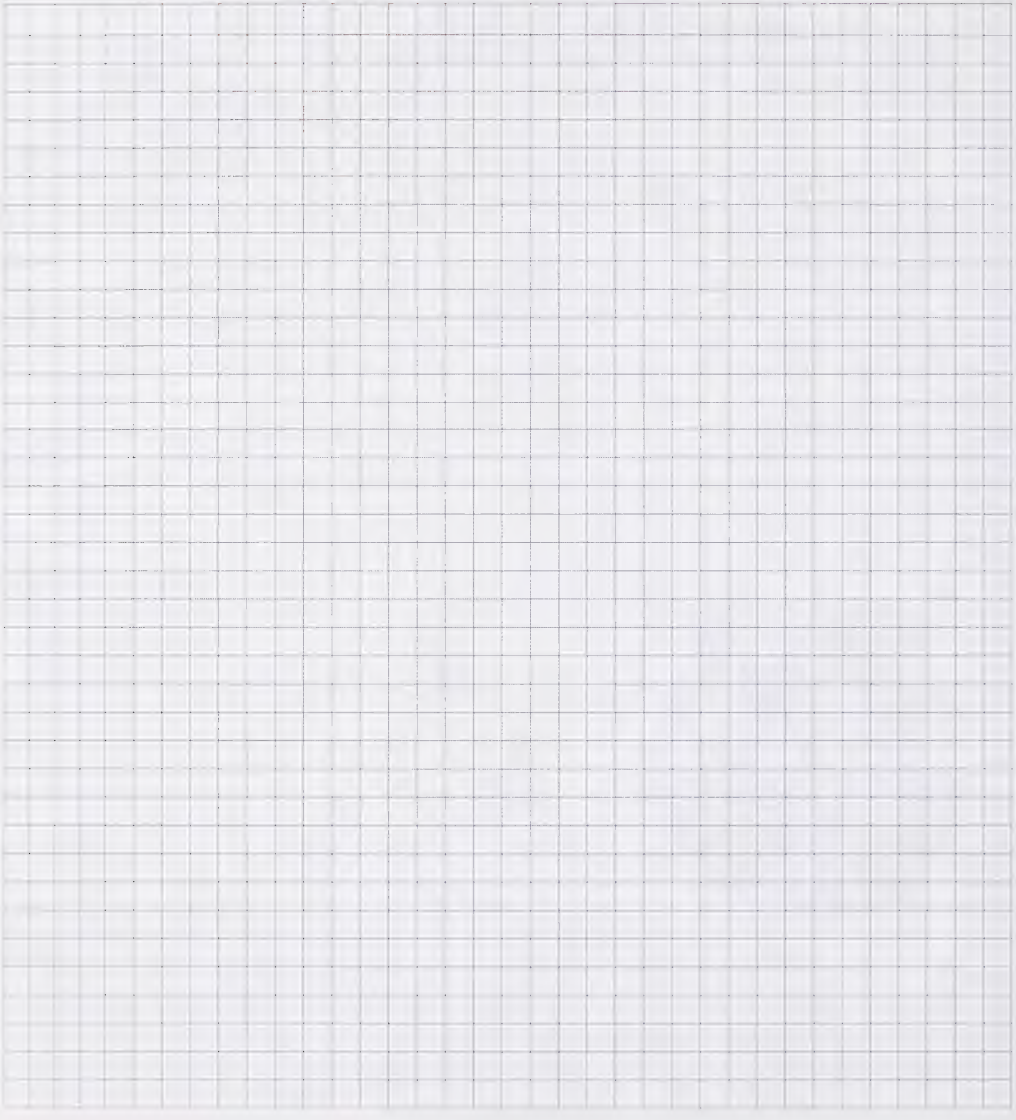
2. Rolling two six-sided dice and finding the sum

3. Tossing a coin and then spinning the spinner

For 4 – 5: Use the fundamental counting principle to find the number of possible outcomes when you combine one item from each category.

4. 5 vegetables, 3 fruits

5. 3 skirts, 7 shirts



Math 6
Unit 4

Quiz
Lesson 7

Theoretical Probability

For 1 – 5: The spinner is spun then the six-sided die is rolled. When listing probabilities, use fractions, decimals, and percents.

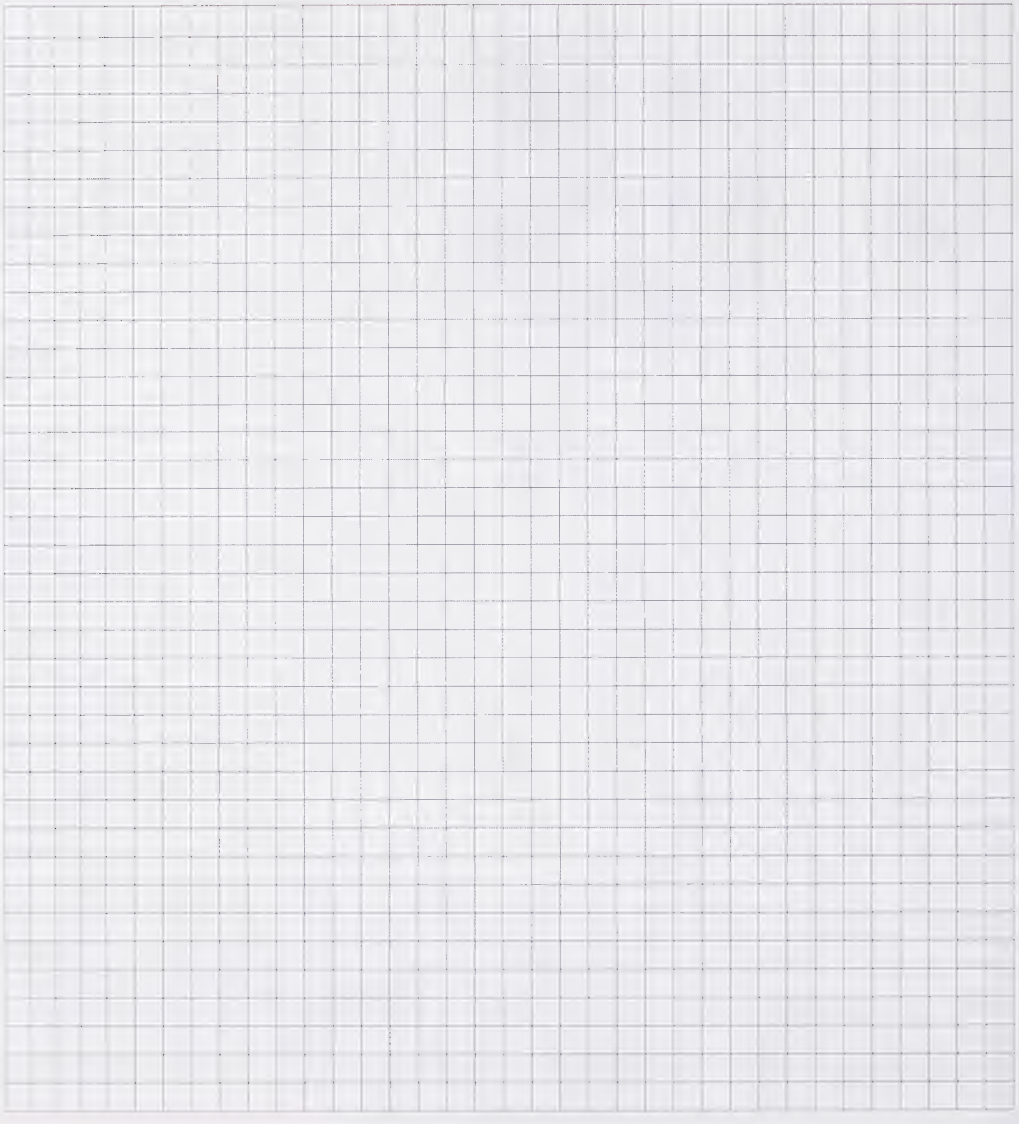
1. List all possible outcomes.

2. Find P(cherry, even).

3. Find P(grapes, 2).

4. Find P(orange, any number).

5. Find P(apple, any number).



Math 6
Unit 4

Quiz
Lesson 8

Experimental Probability

For 1 – 5: Alyssa conducted an experiment by rolling a six-sided die 20 times. Here are her results:

3	4	1	6	3
1	3	2	4	5
5	6	3	2	1
5	5	2	6	1

Find the theoretical probability and experimental probability for each of the following events in fraction and decimal form. Round decimals to the nearest hundredth, if necessary.

		Theoretical		Experimental	
		Fraction	Decimal	Fraction	Decimal
1.	P(4)				
2.	P(6)				
3.	P(3 or 6)				
4.	P(even)				
5.	P(not 1)				

Math 6

Unit 4

Test

Lessons 1 - 8

For 1 – 3: Write each ratio in three ways.

1. 4 people to 7 seats

2. 12 horses to 8 saddles

3. 5 CDs to 8 MP3s

For 4 – 8: Cameron has a bag full of marbles. Write the following ratios in word form, ratio form, and fraction form.

R = Red, B = Blue, G = Green

4. Red to Total

5. Blue to Green

6. Green to Red

7. Red to Blue

8. Blue to Total

9. Which ratios from numbers 4 – 8 are part to part ratios?

10. Daksha is setting the table. He needs 5 pieces of silverware for each person. If there are 10 people, how many pieces of silverware will he need?

Pieces of Silverware	5								
People	1								10

11. Write the ratio 15:100 as a percent.

12. Write the fraction $\frac{42}{100}$ as a percent.

13. Write 25% as a ratio in word form.

14. Write 49% as a fraction.

15. Write 38 out of 100 as a decimal and a percent.

For 16 – 18: Find the percent of each number. Use a calculator.

16. 20% of 35 _____

17. 25% of 280 _____

18. 45% of 40 _____

For 19 – 20: Use the fundamental counting principle to find the number of possible outcomes when you combine one item from each category.

19. 6 shirts, 3 pants

20. 2 vegetables, 4 drinks

For 21 - 24: The spinner is spun as an experiment. When listing probabilities, use fractions.

21. List all possible outcomes for the experiment.

22. P(3)

23. P(even)

24. P(not 4)

25. List all possible outcomes for the following experiment:
Spin the spinner then toss a coin.

For 26 – 30: Alyssa conducted an experiment by rolling a six-sided die 10 times. Here are her results:

5	2	1	5	3
6	4	2	5	6

Find the theoretical probability and experimental probability for each of the following events in fraction and decimal form. Round decimals to the nearest hundredth, if necessary.

		Theoretical		Experimental	
		Fraction	Decimal	Fraction	Decimal
26.	P(2)				
27.	P(1)				
28.	P(2 or 6)				
29.	P(even)				
30.	P(not 1)				

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